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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/672,953	09/26/2003	Bin Zhang	200208037-1	9403
22879 7590 11/28/2008 HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400				
EXAMINER				
ONYEZIA, CHUKS N				
ART UNIT		PAPER NUMBER		
3691				
NOTIFICATION DATE		DELIVERY MODE		
11/28/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/672,953

Applicant(s)

ZHANG ET AL.

Examiner

CHUKS ONYEZIA

Art Unit

3691

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-8,10-15 and 17 is/are rejected.
- 7) ☒ Claim(s) 3,9 and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/888)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.
2. Applicants' amendment and arguments filed on September 18, 2007 have been fully considered, and discussed below. It is noted that applicant has amended claims 1, 9, and 16. Therefore, claim 1-17 are pending and currently considered for examination.

Allowable Subject Matter

3. Claims 3, 9, and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1-5 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Based on Supreme Court precedent, a method/process claim must (1) be tied to another statutory class of invention (such as a

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particular apparatus) (see at least *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876)) or (2) transform underlying subject matter (such as an article or materials) to a different state or thing (see at least *Gottschalk v. Benson*, 409 U.S. 63, 71 (1972)). A method/process claim that fails to meet one of the above requirements is not in compliance with the statutory requirements of 35 U.S.C. 101 for patent eligible subject matter. . Here the claims fails to meet the above requirements because the steps are neither tied to another statutory class of invention (such as a particular apparatus) nor physically transform underlying subject matter (such as an article or materials) to a different state or thing.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1, 2, 4-8, 10-15, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Messmer et al. U.S. Patent Number 7,096,197 B2 (PTO-892 Reference A) in view of Makivic U.S. Patent Number 6,061,662 (PTO-892 Reference C).

8. As per claim 1, Messmer teaches a method, comprising:
obtaining historical auction data (Col. 10 Lns. 1-5);
selecting a bidder; obtaining a value distribution for the selected bidder (Col. 9 Lns 39-50); and

However Messmer does not explicitly disclose;
determining, from the historical auction data, a first parameter that is a function of a joint bid distribution and a density function related to the joint bid distribution or solving an equation that includes the first parameter and the selected bidder's value distribution, and not the value distribution of other bidders, to compute a bid value associated with the selected bidder for a given bid.

Makivic discloses the uses of historical data to form a probability density in determining an option price(see Makivic Col 25 Lns. 21-25). Makivic further discloses deriving a price sensitivity parameter and solving a simulation to compute an option price (Makivic Col 25 Lns. 4-15). It would have been obvious for one of ordinary skill in the arts to apply combine these two disclosers in this way for the purpose of performing

online, network-based quantitative analysis and derivative valuation for market participants (Makivic Col 2 Lns. 59-62).

9. As per claim 2, Messmer and Makivic teach the above limitations of claim 1. Makivic further teaches solving the equation comprises solving an ordinary differential equation that comprises a probability value distribution associated with the selected bidder and the derivative of the probability value distribution (see Makivic Col. 10 Lns. 11-30).

10. As per claim 4, Messmer and Makivic teach the above limitations of claim 1. Makivic further teaches determining a first parameter comprises computing a ratio of the density function to the joint bid distribution (Makivic Col. 28 Ln. 33-40).

11. As per claim 5, Messmer and Makivic teach the above limitations of claim 1. Makivic further teaches repeating the acts of selecting a bidder, obtaining a probability value distribution for the selected bidder and solving the equation for additional bidders (Col. 2 Lns. 65-67) examiner interprets the object of providing for plurality of analyses as repeating the price process.

12. Claim sets 6-8,10,11, 12-13, and 14,15,17 are rejected using logic similar to that used to reject claim set 1,2,4,5 (Col. 24 Lns. 16-40) examiner interprets that system limitations

of above claims are detailed with the description of computer and internet network.

Response to Arguments

13. Applicant's arguments with have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHUKS ONYEZIA whose telephone number is (571)270-1372. The examiner can normally be reached on Monday - Thursday 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Kalinowski can be reached on 571-272-6771. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Chuks Onyezia/
Examiner, Art Unit 3691

/Alexander Kalinowski/
Supervisory Patent
Examiner, Art Unit 3691
